

REMARKS

This Response responds to the Office Action dated August 11, 2003 in which the Examiner rejected claims 1-13 under 35 U.S.C. § 102(b) and stated that claims 14-18 are allowed.

Claim 1 claims an image processing device and claim 4 claims an image processing method for processing images which are recorded in a recording medium. The device comprises commanding a processing to be executed for the image by an indicator. Rank data is set up by a controller in accordance with the processing commanded by the indicator. A deletion directional member directs deletion of an image recorded in the image recording medium. A compressor compresses the image based on data when the deletion of the image is directed. Finally, the compressed image is stored.

Through the structure and method of the claimed invention a) setting up rank data based upon processing commanded, b) directing deletion of an image and c) compressing the image based upon the direction to delete the image as claimed in claims 1 and 4, the claimed invention provides an image processing device and method in which an image which is to be deleted is compressed rather than deleted so that an incorrect operation of the delete button prevents the image from being completely erased. The prior art does not show, teach or suggest the invention as claimed in claims 1 and 4.

Claim 5 claims an image processing device and claim 8 claims an image processing method for processing images which are recorded in a recording medium. The device comprises commanding a processing to be executed for the image by an indicator. A recorder records a time when the indicator commands processing. A timer measures an

elapsed time since the recorder recorded. A controller changes the compression rate, which is set based upon an evaluation value for the image data, based on output from the timer or the measured date and time.

Through the structure and method of the claimed invention a) recording time when an indicator commands processing to be executed for an image, b) measuring an elapsed time since the time when the indicator commands processing and c) changing a compression rate based upon date and time or output from a timer as claimed in claims 5 and 8, the claimed invention provides an image processing device and method which allows the compression rate to be altered in accordance with an evaluation value while decreasing file size. The prior art does not show, teach or suggest the invention as claimed in claims 5 and 8.

Claim 10 claims an image processing device and claim 12 claims an image processing method for processing images which are recorded in a recording medium. The device comprises commanding a process to be executed for an image by an indicator. A controller sets up an evaluation value based upon the processing to be executed for the image. A recorder records a time when the indicator commands the processing. A timer measures an elapsed time since the time when the processing was commanded. A detector detects that the indicator gives no command for a predetermined time or more based upon the output from the timer. The controller sets a lower evaluation value when no command is given for the image for a predetermined time or more.

Through the structure and method of the claimed invention a) setting up an evaluation value based upon processing to be executed for the image, b) recording a time

when the processing is commanded and c) measuring an elapsed time since the time when the processing is commanded as claimed in claims 10 and 12, the claimed invention provides an image processing device and method which allows history data to be reevaluated over time. The prior art does not show, teach or suggest the invention as claimed in claims 10 and 12.

Claims 1-13 were rejected under 35 U.S.C. §102(b) as being anticipated by *Ichimura* (U.S. Patent No. 6,188,831).

Applicants respectfully traverse the Examiner's rejection of the claims under 35 U.S.C. §102(b). The claims have been reviewed in light of the Office Action, and for reasons which will be set forth below, applicants respectfully request the Examiner withdraws the rejection to the claims and allows the claims to issue.

Ichimura appears to disclose a data storing apparatus, such as a conference minutes recording system or a news gathering recording system, for storing data such as conversation audio from minutes and news gathering, and the images of conference and news gathering scenes and conference memos and news gathering memos related to these. (col. 1, lines 12-17) FIG. 1 is a block diagram showing the data storage apparatus composed of an audio data input section 1, an image data input section 2, a condition-matching interval detection section 3, a time-series data storing section 4, a correspondence relationship storing section 5, a compression section 6, a time-series data storing section 7, a playback section 8, a control section 9, a display section 10, a user-input data detection section 11, and a playback specification section 12, each connected to a system bus 13. The output terminal of the audio data input section 1 is also

connected to the condition-matching interval detection section 3. (col. 10, lines 51-63)

The condition-matching interval detection section 3 determines that active conversation is being conducted, the shorter the time interval is from when one speaker finishes speaking to when another speaker starts speaking. (col. 12, lines 4-10) In addition, it is also determined that active conversation is being conducted when one speaker starts speaking before another speaker has finished speaking. The correspondence relationship storing section 5 creates a correspondence between and stores the user-input data input by the user, for example, using the electronic pen 23, data (e.g., the relative coordinates and absolute coordinates on the X-Y coordinate axes and the like) specifying the display position of this user-input data on the screen, and the storage address in the time-series data storing section 4 of the image data or audio data input in an important interval, such as an interval determined by this user input data and the condition-matching interval detected by the above-described condition-matching interval detection section 3. (col. 12, lines 50-60)

The compression section 6 configuration accomplishes data compression on the image data stored in the above-described time-series data storing section 4. In this case, the compression section 6 is composed so that the data compression ratio or data compression method can be dynamically varied on the basis of the data of the interval specified by the user-input data from the correspondence relationship storing section 5 and the detection results of the condition-matching interval detection section 3. (col. 13, lines 10-19) The time data storing section 7 stores the time when recording of the input audio signal and image signal to the time-series data memory 4 was started. Furthermore, the time data storing section 7 has a function for measuring the elapsed time from the recording start

time. Furthermore, when the elapsed time from the recording start time has reached a predetermined set time the time data storing section 7 outputs a compression trigger timing signal that is the impetus for starting the above-described compression of the image data of the time-series data storing section 4 by the compression section 6. (col. 13, lines 48-64)

The image data and/or audio data stored in the time-series data storing section 4 are compressed when the level of importance is low (such as when a preset time has elapsed since the data was stored), so as to form empty capacity in the memory of the time-series data storing section 4. However, condition-matching intervals in which user-input data has been detected in that interval are deemed to be important intervals and those intervals are not compressed or the compression ratio is reduced so that high quality is maintained.

FIG. 16 is a drawing explaining the actions during data compression along with the flow of each type of data and the flow of the output of each section during his time. The time data storing section 7 outputs a compression process start command to the correspondence relationship storing section 5 when the elapsed time from when the audio data and image data were stored in the time-series data storing section 4 has reached a preset time. In other words, in step S502 of the process routine of the time data storing section 7 in FIG. 13, the current time supplied from an unrepresented clock circuit and the storage start time stored in the time data storing section 7 are compared and a determination is made as to whether or not the storage time of the data has passed a preset time. When it is determined that this preset time has elapsed, the flowchart moves to step S503 and a compression process start is requested of the correspondence relationship storing section 5.

Furthermore, when this request has been sent, or when it is determined in step S502 that

the preset time has not elapsed, the flowchart returns to step S500. For example, when the above-described preset time is set to one month, the compression process start request is generated one month after the storage start time. The data newly stored in the time-series data storing section 4 undergoes a compression process one month later. (col. 18, line 51 through col. 19, line 21)

Thus, *Ichimura* merely discloses compressing image data and/or audio data when the level of importance is low (such as when a preset time has elapsed since the data was stored), i.e., time data storage section 7 outputs a compression process start command when the elapsed time from when the audio data and the image data were stored and the time-series data storage section 4 has reached a preset time (column 18, lines 52-55, column 18, line 66 through column 19, line 3). Nothing in *Ichimura* shows, teaches or suggests setting up rank data based upon commanded processing to be executed for an image as claimed in claims 1 and 4. Rather, *Ichimura* merely discloses indicating a start command to compress data when an elapsed time from when data is stored has reached a preset time. That is, the level of importance in *Ichimura* is based upon a preset elapsed time from when data was stored and is not based upon a commanded processing to be executed for an image.

Additionally, *Ichimura* merely discloses compressing image data and audio data to form empty capacity in the memory (i.e., compression of data allows less memory space to be used, col. 18, lines 51-57). Nothing in *Ichimura* shows, teaches or suggests directing deletion of an image recorded in an image recording medium as claimed in claims 1 and 4.

Rather, *Ichimura* merely discloses compressing an image so that the amount of memory available increases.

Also, *Ichimura* merely discloses compressing data based upon an elapsed time from when data is stored (col. 18, line 66 through col. 19, line 3). Nothing in *Ichimura* shows, teaches or suggests compressing an image based upon when the deletion of an image is directed as claimed in claims 1 and 4. Rather, *Ichimura* merely discloses automatically compressing an image based upon an elapsed time from when the data was stored.

Furthermore, *Ichimura* merely discloses a time data storage section 7 which stores the time when recording of audio and image signals were started, which measures an elapsed time from the recording start time and which outputs a compression trigger signal when the elapsed time reaches a predetermined set time (column 13, lines 49-64). Nothing in *Ichimura* shows, teaches or suggests recording a time when an indicator commands processing to be executed for an image as claimed in claims 5, 8, 10 and 12. Rather, *Ichimura* merely discloses a time data storage section 7 which a) stores the time when recording of audio and image signals are started, b) measures elapsed time from the recording start time and c) outputs a compression trigger signal. In other words, the storing of the time when the recording of the audio and image signals are started in the time data storing section 7 in *Ichimura* does not mean that an indicator commands processing to be executed for an image. Storing of time in *Ichimura* only indicates that recording has started (i.e., no processing of an image is indicated in *Ichimura*).

Additionally, *Ichimura* merely discloses measuring an elapsed time from the recording start time of audio and image signals (col. 13, lines 54-55, column 18, line 66

through col. 19, line 3). Nothing in *Ichimura* shows, teaches or suggests measuring an elapsed time since a time when an indicator commands processing to be executed for an image as claimed in claims 5, 8, 10 and 12. Rather, *Ichimura* merely discloses a time data storage section 7 which measures elapsed time from a recording start time.

Additionally, *Ichimura* merely discloses dynamically varying the compression ratio based on the data indicating a condition-matching interval (i.e., whether active conversation is conducted, col. 19, lines 59-67). Nothing in *Ichimura* shows, teaches or suggests changing the compression rate based upon an elapsed time since the time when the indicator commands a processing to be executed for an image as claimed in claim 5 or changing a compression rate based upon measured date and time as claimed in claim 8. Rather, *Ichimura* merely discloses varying the compression ratio based upon a condition-matching interval indicating active conversation.

Finally, *Ichimura* merely discloses outputting a compression start command based upon an elapsed time from when audio and image data are stored. (col. 18, line 66 through col. 19, line 3) Nothing in *Ichimura* shows, teaches or suggests setting up an evaluation value based upon processing to be executed for an image and lowering the evaluation value based upon no command being given for a predetermined time as claimed in claims 10 and 12. Rather, *Ichimura* merely discloses outputting a compression start command based upon when an elapsed time from data being stored reaching a preset time.

Since nothing in *Ichimura* shows, teaches or suggests a) setting up rank data based upon processing to be executed for an image, directing deletion of an image and compressing an image based upon a direction to delete the image as claimed in claims 1

and 4, b) recording a time when an indicator commands processing to be executed for an image, measuring an elapsed time since the time when the indicator commands processing to be executed for the image as claimed in claims 5, 8, 10 and 12, c) changing a compressing rate based upon an elapsed time since the time when the indicator commands processing to be executed for an image as claimed in claim 5, d) changing a compression rate based upon measured date and time as claimed in claim 8 and e) setting up an evaluation value based upon processing to be executed for an image and lowering the evaluation value based upon no command given for a predetermined time as claimed in claims 10 and 12, it is respectfully requested that the Examiner withdraws the rejection to claims 1, 4, 5, 8, 10 and 12 under 35 U.S.C. §102(b).

Claims 2-3, 6-7, 9, 11 and 13 depend from claims 1, 5, 8, 10 and 11 and recite additional features. It is respectfully submitted that claims 2-3, 6-7, 9, 11 and 13 would not have been anticipated by *Ichimura* within the meaning of 35 U.S.C. §102(b) at least for the reasons as set forth above. Therefore, applicants respectfully request the Examiner withdraws the rejection to claims 2-3, 6-7, 9, 11 and 13 under 35 U.S.C. §102(b).

Thus it now appears that the application is in condition for reconsideration and allowance. Reconsideration and allowance at an early date are respectfully requested.

If for any reason the Examiner feels that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this case.

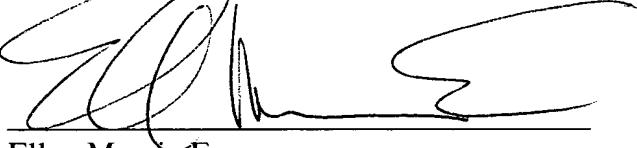
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In the event that this paper is not timely filed within the currently set shortened statutory period, applicants' respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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